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Memes: The Interaction Between Imagery and Subculture

An Analysis of Situation, Race, and Gender on the Pi Kappa Delta Social Media App

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Abstract

Collegiate speech and debate participants are committed to performance excellence and organizational unity. Pi Kappa Delta, a central organization for this subculture, annually hosts a national competition, during which competitors can create and post memes via the tournament phone app. While it is well-known that memes are a function of participatory culture, no analysis has yet examined memes exclusively consumed by the same subculture which created them. In this study, we examine the implicit messaging of this memetic imagery, and by doing so, gain insight into both the collegiate forensics subculture, and the function of memes in a small group.

Keywords: memes, identity, forensics, speech, debate

Introduction

Joy Buolamwini, founder of the Algorithmic Justice League, was an undergraduate in computer science when she first began to realize the extent of the biases in decision-making software (Tucker, 2017). As she worked in social robotics, she found that the robots with which she interacted had difficulty recognizing her face; dismissing it as an outlier, she assumed the “glitches” would be fixed—until she encountered the same issue in Hong Kong. Finally, she found that robots could better detect her features when she wore a white mask, and thus, she finally recognized the source of her problem. Buolamwini is a black woman.

Facial recognition software developers used benchmark data sets to demonstrate the competency of their algorithms. However, because the representativeness of the benchmarks had not been questioned, the facial recognition software remained largely ineffective at recognizing faces like Buolamwini’s. The benchmark for recognizing faces was, in reality, the benchmark for recognizing some faces. Society as a whole internalizes and creates these benchmarks, which can be reflected both in the technology we use and in the way we use it. The images and dialogues that are disseminated through social media reveal the subconscious “benchmarks” of their creators; they answer the question, “what do you see as normal?”

The steady progression of technology has often outpaced the ethical reflections needed to guide its use (Marshall, 1999). As more data becomes easily accessible, technology users must necessarily develop ethical guidelines to follow, including responsible ethical guidelines for jokes and/or photos shared on social media. These ethical guidelines must include considerations related to stereotyping and representativeness in order to best serve the diverse community which uses social media platforms.

How community members view themselves and view others is influenced by the visual media they consume and create; the meme is no exception. The intentional or unintentional messages of internet memes have widespread implications, as internet memes shape public discourse and identity formation (Knobel & Lankshear, 2007). Because memes are rarely “owned” by a creator, but rather incite a process of writing, re-writing, and sharing over the course of their dissemination, memes are considered to be artifacts of participatory culture (Juza, 2013). Thus, they tend to both reflect and shape the beliefs and attitudes of the culture in which they are shared (Juza, 2013).

Collegiate forensics is a formalized platform in which students can actively engage in persuasion, productive dialogue, and competitive speaking. Pi Kappa Delta, the oldest national collegiate forensics organization in the United States, hosts its national tournament annually (Pi Kappa Delta, 2017). Pi Kappa Delta and its community members communicate during this tournament through the Pi Kappa Delta phone application. In addition to providing scheduling updates, timing notifications, and other information, the application serves as a platform for a “meme contest” and for sharing humorous or endearing imagery.

In this paper, we explore whether disparities exist in the categorical representation of memetic imagery, and whether these disparities may subtly reflect biases in the collegiate forensic culture. By examining the potential implications of memes upon the assessment of individual sub-cultures, we hope to expand the literature on memes as a cultural and literary phenomenon. The current literature on memes focuses primarily on particular kinds of memes or on the manner of a meme’s dissemination through social networks, rather than on the direct interaction between memes and the subculture which both creates and consumes them. We posit that this is largely due to the size of most U.S. subcultures, and that the collegiate forensics

community provides a unique opportunity to isolate a subculture and analyze its internal communication.

This study is also relevant to forensics itself, as it may indicate inequalities or disparities between perceptions of its participants. This is important because while memes reflect their creators, they also begin to shape perceptions of their consumers, whether through inaccurate or absent representation.

Literature Review

To further examine the role memes play in sharing culture and creating identity within subcultures, a review of the relevant scholarly literature is in order.

Social Media and Memes

Social media is defined by Kaplan & Haenlein (2010) as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content” (61). Social media has created unprecedented opportunities to access information, engage in public dialogue, and respond collectively (Shirky, 2011). Users report that their participation on social media serves a variety of purposes. For example, a user may employ social media sites such as twitter to signal common ground (Lampe, Ellison, & Steinfield, 2007). Additionally, roughly 64% of social media users engage on social media to entertain themselves; 80% use social media sites to seek information (Whiting & Williams, 2013).

Memes have become, for some, an opportunity to do all three. The word “meme” originates from the work of Richard Dawkins in 1979, which suggested that genetics were not the only determining factor in human behavior (Davison, 2012). “Memes” were thus originally considered to be mannerisms, skills, or other behavioral/informational components that were

either taught directly or transmitted by imitation—any nongenetic behavior qualified as a meme (Blackmore, 2000; Davison, 2012).

The word has acquired a more colloquial meaning in recent years, and now describes “a piece of culture, typically a joke, which gains influence through online transmission” (Davison, 2012). Memes can encompass various forms; the earliest noted meme was the smiley face emoticon, which Scott Fahlman created in 1982 to mark which comments were jokes and to thus avoid misinterpretation due to low media richness between bulletin-board users at Carnegie Mellon (Davison, 2012). A common meme form, an image macro, employs a combination of visual imagery and text to convey its “ideal,” or the idea which the meme transmits (Davison, 2012). The current research focuses on memes which closely follow the image macro memetic form. Images in the current research which deviate slightly from the typical image macro form have text below the image, rather than inside of it.

Mememes may be shared widely or between a small group of friends. Many memes may be primarily transmitted through homogenous communities (Bauckhage, 2011). Thus, they may serve as a simple but concrete way to indicate community belonging and shared values. However, because memes are able to be coopted, edited, and otherwise changed, they also often become a platform for intergroup dialogues, and thus, the exchange of information or beliefs between those of different backgrounds.

The intensity of these beliefs may be amplified by the anonymous nature of meme culture; because the creation and dissemination of memes often provides anonymity, the producers of offensive memes can escape punishment or censure (Davison, 2012). This may produce the noticeable trend of memes which cross accepted social boundaries and are considered offensive (Bauckhage, 2011).

Though cultural transmission through memes results in some animosity due to ideological friction, memes can also serve to provide multiple perspectives on single issues, whether they be political or identity-based. The unfortunate consequence is that this back-and-forth necessarily creates winners and losers (Milner, 2012). Memes are microcosms of culture war.

Representativeness

Memes, as all visual imagery, must be studied in the context of representativeness. Research on representativeness and cultural transmission in textbook pictures, television, and other media has demonstrated that visual imagery can directly impact the self-perception of its viewers and/or reflect the culture which produced it (Good, Woodzicka, & Wingfield, 2010; Greenberg and Atkin, 1978; Park, 2005; Botta, 2000). Ferree and Hall (1990) suggest that pictures serve as a way of “capturing the currently acceptable conceptualization of race and gender” held by society.

Social acceptability is relevant because, as the psychologist Mead (1934) argues, identity is fluid and responsive rather than static. Identity is also formed in the presence of community; Hecht (1993) argues that identity is formed through communication and relationships. Because visual imagery such as memes constitute an easily accessible, visual representation of community, they will impact and potentially alter their viewer’s self-concept.

Visual imagery can reflect and perpetuate cultural biases. In one analysis of pictures in sociology textbooks, researchers posited that the overwhelming bias towards using women in pictures of “Family” and “Population” topic sections potentially served to indicate “the popular image of the nuclear family” (Schneider & Hacker, 1973). Other researchers have corroborated gender bias in textbooks, noting that favorable images of females tended to emphasize their

beauty, in contrast to images of males, which tended to emphasize their bravery (Blumberg, 2008).

Further research found that such gender biases in textbook photography can directly impact student anxiety and performance. In one study, students were given one of three chemistry lessons before taking a comprehension test and an anxiety test (Good et al., 2010). Female students who had viewed the non-stereotypical lesson, or the lesson containing more pictures of female than male scientists, scored higher in comprehension. Males who had viewed the stereotypical lesson, or the lesson containing more pictures of male than female scientists, scored higher on comprehension. The researchers found that the lesson with mixed-gender images produced no difference in comprehension between male and female students, emphasizing the importance of representativeness and diversity in visual imagery. This study demonstrated that the implicit messaging of visual imagery changes the ability of a student to perform, likely due to the self-perception changes which result from media consumption.

Research on television programs demonstrates that racial differences in media consumption and interpretation as a whole exist. Greenberg and Atkin (1978) found that black children were more likely to accept fictional stories as reality and were more likely to identify with televised black characters. If these patterns of consumption generalize to media forms such as memes, then racial biases in memes and/or stereotypical portrayals may have a greater effect on minority consumers.

Visual media also affects viewers body image and self-concept. Women who read beauty and fashion magazines had an increased desire to be thin, in part because of “the prevalence of the thin ideal in mass media, the presumed influence of the thin ideal on others, and the perceived influence of the thin ideal on self” (Park, 2005). By simply viewing images of thin

women in that context, women may have internalized the visual imagery of the “ideal” woman and the implications of this ideal imagery upon their own bodies.

Just as weight-exclusionary images may affect women’s self-perception, images which portray beauty as being monopolized by white women affects the self-perception of black women, many of whom, upon encountering the prevalent beauty standards which tend to exclude them, feel marginalized (Perkins, 1996). Mok (1998) records similar observations of Asian American women, noting that the monoracial beauty standard inherently excluded them and that the lack of positive Asian-American portrayals in media effected the self-perception of Asian American women. This indicates that a lack of representativeness in visual imagery can lead to feelings of exclusion.

However, black adolescents may interpret idealized images differently than their white counterparts (Milkie, 1999). Researchers disagree as to the degree of difference between the reactions of white and black viewers of idealized television imagery. Renee Botta (2000) suggested that the more adolescent girls idealized television images, the more dissatisfied they were with their personal appearance; while black adolescents tended to have a larger ideal size and greater body satisfaction than their white peers, there was no difference in the rate of eating disorders as a reaction to the desire to be thin (Botta, 2000). This suggests that idealized imagery can result in self-loathing and eating disorders for both white and black adolescents.

Though most white adolescent girls felt that idealized visual representations of their gender were unrealistic, they nevertheless aspired to look like them (Milkie, 1999). Black girls, who critiqued the lack of diversity and realism in the media which they were exposed to, felt less compulsion to match the beauty standard, in part because it directly contradicted the perceived messages of their immediate social environment (Milkie, 1999).

This may mirror the findings of other researchers, who suggest that the combination of media exposure and immediate social environment influences individual body image (Park, 2005). Because the memes in the Pi Kappa Delta app are media images exclusively propagated by an immediate social environment, they may have more influence than memes propagated through more distant forms of social media.

Subconscious Biases and Visual Imagery

Photos such as those in many memetic images have particular power to transmit implicit or subtle messages, since photographs are seen as presenting objective reality (Whatley 1988). Gilman (1985) suggests that images of individuals can easily be interpreted as representing a wider group. Whatley (1988) also notes that images of subgroups which are represented less have more potential to “represent” that subgroup. Images, as opposed to other media forms, may carry more subconscious authority and thus have a greater effect upon the resulting implicit biases they create in their viewer.

These biases become particularly relevant when these images are shared on social media platforms. Greenwald and Banaji (1995) explain that while social behavior is often treated as conscious behavior, this may be an outdated view; it is more accurate, and perhaps more productive, to view social interactions as implicit and/or unconscious. They expound on the concept by suggesting that “attitudes, self-esteem, and stereotype have important implicit modes of operation.”

Greenwald and Banaji (1995) acknowledge that the theory of “mere exposure” has wide scientific consensus. Zajonc (1968) first posited the idea of mere exposure, hypothesizing that “mere repeated exposure of the individual to a stimulus object enhances his attitude toward it.” This effect is noticeable even in cases where the stimulus is a verbal message. When statements

are repeated, those who hear it are more likely to believe it, having changed their attitude in response to the increased exposure (Arkes, 1991).

Because the presence or absence of a visual stimulus will alter the amount of exposure which that stimulus receives, representativeness of visual imagery may affect the likeability of its subjects. If Asian-Americans are featured only occasionally on television programming, they are receiving less exposure than their European counterparts and thus receiving fewer opportunities to change subconscious attitudes and biases.

Greenwald and Banaji (1995) define implicit stereotypes as “the introspectively unidentified (or inaccurately identified) traces of past experience that mediate attributions or qualities to members of a social category.” Implicit stereotypes will directly affect the interactions which occur based off of them, particularly in light of Greenwald and Banaji’s categorization of social interactions as implicit (1995).

Implicit stereotypes have been observed in many contexts. Banaji, Hardin, and Rothman (1993) found that when participants were exposed to dependence primes, they “rated a female target as more dependent than a male target who performed identical behaviors.” This implicit stereotyping effect demonstrates how seemingly innocuous stimuli may change and/or trigger perceptions that individuals have of those around them.

Implicit stereotyping has also been recorded in medical student performance evaluations, in which women were more likely to be described as “sensitive” than comparable men, and men were more likely to be described as “quick learners” than comparable women (Axelson, Solow, Ferguson, & Cohen, 2010).

Additionally, implicit racial/ethnic bias has been observed among medical professionals, who largely share a low-moderate level of implicit bias (Hall et al., 2015). Implicit stereotyping

and/or bias in this context may be especially dangerous, as “implicit bias was significantly related to patient-provider interactions, treatment decisions, treatment adherence, and patient health outcomes” (Hall et al., 2015). This example epitomizes the idea that while some stereotypes may be comparatively harmless, stereotyping as a whole can have dangerous results.

By examining the visual imagery created by and exchanged by an insular community, it may be possible to examine the implicit stereotypes of that community.

Pi Kappa Delta and Competitive Forensics

Collegiate speech and debate, often known as “forensics,” is a competitive activity encompassing multiple speech and debate events. Compton (2006) elucidates the goals of forensics, which include: “the pursuit of excellence in public speaking, debate and literary performance” (27). He also notes that participants in the forensics community are committed to “intellectual scholarship” and “insightful practical and pedagogical research” (27).

While many collegiate forensics organizations exist, Pi Kappa Delta is “the oldest collegiate national forensic organization of its kind in the United States” (Littlefield, 1996). The Pi Kappa Delta website explains that Pi Kappa Delta was founded in 1911 by John Schields and Egbert Nichols, who “felt the need to create an organization for colleges across the country to recognize orators and debaters.” Its motto, “art of persuasion, beautiful and just,” indicates its pedagogical approach; though competition is important, it is not the primary purpose of the organization (Littlefield, 1996).

Pi Kappa Delta lists its organizational values on its website (2017), which almost exclusively emphasize the need for diversity, respectful dialogue, and inclusion. The former President of Pi Kappa Delta, David Bailey, notes on the same page that speech and debate fosters “research, independent and critical thinking, and leadership.”

These values correspond with those of the forensics community outside Pi Kappa Delta. As a whole, the collegiate forensics community prioritizes inclusiveness and social/legal justice, though these priorities do sometimes come into conflict with student competitive success (Walker, 2016).

Social Learning in the Culture of Forensics

Students who participate in competitive forensics are socialized into a community through a process that can “deeply influence an individual’s sense of self or identity” (Croucher, Long, Meredith, Oommen, & Steele, 2009, 74). While little research has been done to investigate the impact of competitive forensics upon individual identity (Croucher et al., 2009), social learning remains a critical aspect of the organizational culture of competitive forensics, as it is the mechanism through which competitive norms are often established (Reid, 2015).

Social learning in this case extends beyond the content of individual speeches. Reid (2015) notes that even female competitor’s choice of clothing can and has indirectly communicated that females must adhere to normative feminine standards in order to succeed competitively. It follows, then, that memes which characterize competitors or events in particular ways can be a mechanism through which this social learning occurs.

Diversity and Other Issues in Forensics

Competitive forensics constitutes a unique organizational culture, which the memes of the Pi Kappa Delta represent. Because memes are artifacts of participatory culture, they should reflect the forensic community’s priorities, biases, and habits, of which there are many.

The culture of forensics emphasizes diversity in particular; one survey found that 54% of debate team members were female, and 58% of individual event participants were female (Allen, Trejo, Bartanen, Schroeder, & Ulrich, 2004). Research is inconsistent regarding whether females

or males identify more with forensics culture, though the more recent research suggests that men do (Croucher, Thornton, & Eckstein, 2006; Croucher et al., 2009). There was no difference between the motivation of male and female competitors (Croucher et al., 2009).

Forensics has been less effective in cultivating ethnic diversity, as of 2006 and 2009; 70% of debaters were European, 10% were Asian Americans, 7% were African American, and 7% were Hispanic (Allen et. al., 2004). Though there are more Asian American participants than African Americans, African Americans tend to identify more with their forensics programs than do other minority ethnic groups (Croucher et al., 2009). Croucher, Thornton, and Eckstein (2006) found similar results, with 76.9% of respondents choosing Caucasian for their ethnicity.

Because organization identification directly relates to a competitor's motivation to succeed (Croucher et al., 2006), these discrepancies in identification between ethnicities may indirectly or directly impact competitive success. Students who identify less with their forensics organization, or who feel they belong in the organization less than do other competitors, may perform more poorly, and thus perpetuate incorrect and negative competitive stereotypes.

In light of previously discussed research which examines the importance of representation in visual imagery, a lack of representation in visual imagery produced and shared by the collegiate forensics community may reinforce the idea that some ethnic groups "fit" competitive forensics more than do others. This leads to our first research question.

RQ 1: Do memes shared by competitors reflect the diversity of the activity?

Additionally, while collegiate forensics is an identifiable subculture (Paine 2005), it is also composed of smaller subcultures which may relate to or compete with one another in various ways. Cambria and Klopff (1978) noted that students who competed in oral interpretation seemed to identify themselves differently from students who participated in debate or other

speech events, whereas other debaters and public speakers identified similarities between each other. Similarly, Miller (2005) noted that differences between the cultural/competitive norms of forensics regions qualified each individual region as “a culture within a culture within a culture within a culture within a culture.”

While gender, ethnicity, event type, and region may all contribute to or define subgroups within competitive forensics, there is no research regarding how these subgroups view one another in the context of forensics. While some research examines how limited numbers of subgroups identify with their forensic team or organization, it rarely examines how forensic subcultures relate to one another or how the visual imagery created by and shared within the forensic community may reflect or effect its members. This leads to the following research questions:

RQ2: How do the memes on the Pi Kappa Delta app portray race?

RQ3: How do the memes on the Pi Kappa Delta app portray sex?

RQ4: How do the memes on the Pi Kappa Delta app portray different competitive events?

RQ5: How do the memes on the Pi Kappa Delta app that include a reference to an event portray race and sex?

Methodology

To answer these research questions, data was collected from the mobile phone application used at the 2017 Pi Kappa Delta national tournament and convention hosted by Boise State University. Photos from the Pi Kappa Delta application were screenshotted and uploaded to DropBox, which automatically numbered each individual photo.

The numbers attributed to the photos were inputted into a randomizer, statrek.com. The minimum was set to 98 (the number assigned to the first photo in the set) and the maximum was

set to 554 (the number assigned to the last photo in the set). 456 randomized numbers were thus given by the number randomizer, with no duplicate entries permitted and no seed used. The data was then cleaned to exclude certain images. Images which were cleaned and excluded from analysis featured: lost-and-found items, objects, snapchat data, clear cartoon individuals, cartoon individuals with inhuman skin colors (such as green), robotic or otherwise humanoid beings, humanoids whose bodies/skin/faces were obstructed from view, anthropomorphic animals (such as Arthur or Spongebob), and/or ambiguous species (such as Muppets or Sesame Street characters). The resulting number of images used for the analysis was 294.

Because of the nature of the Pi Kappa Delta application, which is formatted similar to Instagram in that text is written underneath each photo, some photos did not contain the entirety of the text. In these cases, a second screenshot of the lower half of the text was included, and coders were instructed to examine both photos together as a single image for analysis.

Three surveys were then created to allow four coders to analyze the data; the survey questions were divided into three surveys in order to minimize coding fatigue. Each page of the survey told coders which photo to examine, and asked them five questions. Coders were asked to assess whether the actor was competent or incompetent and whether the situation was positive or negative. As an example, a competent actor might have won a debate round, whereas an incompetent one might have forgotten their memorized speech. Similarly, a positive situation might include a receptive judge, whereas a negative situation might involve challenging competitors. Coders were also asked to assess the perceived race and gender presentation of the actor. Lastly, they were asked whether the meme portrayed a competitive event, and if so, which event. The intercoder reliability for these four coders was calculated using Krippendorff's Alpha and was found to be $\alpha = 0.742$.

This methodology resembled methods used in similar research, including Yoon's (2016) analysis of racist themes in internet memes. In that study, memes were organized into race and thematic content, similar to the way in which the memes in the current study were organized into event type, gender presentation, race, and situational nature. As indicated by the date of Yoon's analysis, research methodology on memes remains largely unestablished due to the recent (and continuing) development of memes as an internet artifact. However, a methodological basis for memetic analysis draws upon past research, including research on the content of graffiti. Stocker et. al. (1972) and Schreer & Strichartz (1997) both categorized pieces of graffiti into various groups in order to investigate the social dynamics of the graffiti's creators. While many analyses organized images or graffiti into particular themes or categories, the current research instead observes the overall themes of which actors are portrayed in which situations.

Results

To answer the first research question, a simple demographic analysis was completed on the resulting coder scores. In total, 206 (70.1%) memes contained images where the actor was acting in a competent way and 88 (29.9%) were deemed to be incompetent. 142 (48.3%) of the memes portrayed a positive situation while 152 (51.7%) portrayed a negative situation. The race of the actors was found to be black 65 times (22.1%), Asian 9 times (3.1%), Hispanic 21 times (7.1%), of European decent 148 times (50.3%), and of multiracial groups 51 times (17.3%). Of the 194 memes, 190 (64.6%) had male actors, 60 (20.4%) had female actors, and 44 (15.0%) had mixed sex groups. In terms of events, 73 (24.8%) contained references to speech events, 96 (32.7%) discussed debate, 13 (4.4%) covered both speech and debate, and 112 (38.1%) did not discuss any events at all.

To answer the second research question, ANOVA were conducted to look for differences based on race for whether the actor was competent or not and whether the situation was positive or not. The first ANOVA examining competency (2 (competency) x 5 (race)) was not significant at the $p=0.05$ level. The second 2 (positive) x 5 (race) ANOVA revealed a main effect ($F(1, 290) = 6.73, p = 0.010, \eta_p^2 = 0.023$). The follow-up post hoc tests determined that memes containing mixed groups of individuals were significantly more positive in nature than other memes that were shared (black ($M=0.34, SE=0.06$), Asian ($M=0.44, SE=0.18$), Hispanic ($M=0.48, SE=0.11$), of European decent ($M=0.45, SE=0.04$), and multiracial groups ($M=0.76, SE=0.06$)). No other differences were found between groups.

A second pair of ANOVAs were also performed to answer the third research question examining the sex of the actor and the competency or positivity of the memes. Neither the ANOVA for competency nor the ANOVA for positivity of the meme showed any significant difference at the $p = 0.05$ level. Because neither test was significant, post hoc analyses were not performed.

A similar process followed for the fourth research question which examined the same two concepts in regards to event type. The first ANOVA for competency showed no significant results. However, the second ANOVA for positivity did reveal a main effect ($F(1, 290) = 9.49, p = 0.002, \eta_p^2 = 0.032$). Further post hoc testing determined that memes that did not include an event or contained both speech and debate events were significantly more positive than those that did (Speech ($M=0.38, SE=0.06$), Debate ($M=0.33, SE=0.05$), Both ($M=0.62, SE=0.14$), None ($M=0.66, SE=0.05$)).

The fifth research question required another series of ANOVAs very similar to those for research questions three and four. However, in this case, ANOVAs were performed to examine

differences in events based on the race and sex of the actor. Both sets of ANOVAs found no significant main effect for differences between groups for either set of comparisons. Again, with a non-significant result, post hoc tests were not performed.

Discussion

The results for the first research question show a mixed improvement in terms of racial representativeness within forensics. However, the memes shared may not directly correlate with the person sharing the imagery. Additionally, males dominated the sharing of images, revealing a stark under-representativeness for females. Whether a bias in memes posted or a bias in individuals using the app, more can be done to promote representativeness within forensics and on this app in particular.

The second and third research questions follow a similar trend. Both ANOVAs showed no main effects for competency which is a positive sign. Actors were equally likely to be shown as competent regardless of race or sex. The same was true for the positivity in regards to sex. The only ANOVA to show a main effect was for the positivity of the meme of multiracial groups. In reexamining the memes posted on the app, the researchers noticed that many people were sharing team photos which were comprised of diverse groups. Those photos were overwhelmingly positive, likely resulting in the above difference. All other potential differences between groups were not significant.

The results of the fourth research question also showed no significant difference in terms of the competency of the actor in the memes for the different event categories. However, a main effect was found in terms of positivity with images describing both speech and debate events or with no mention of events at all being more positive. Team photos likely have some influence on

these results as well. More research is needed to examine the particulars of specific events as the sample sizes were too small per event to have meaningful results.

The fifth and final research question examined differences in events based on the race and sex of the actors. No main effects were found for either ANOVA revealing that the memes were fairly balanced between actors regardless of event. Previous forensics research has noted a sex gap in events like extemporaneous speaking and debate. These results would seem to indicate a positive movement towards a more representative distribution of individuals. While the sharers of the memes are unknown, the perception of forensics created through the sharing of memes based on events does create the impression of a representative culture within the activity.

When viewed together, the results of this study indicate a subculture in which diversity is valued not just in words, but in the images shared by those involved. More effort needs to be expended to make forensics a community that is welcoming and representative of all, especially as noted by the dominance of males posting on the app, but the trend based on previous research is positive. For those participating in the activity, the motto of “the art of persuasion, beautiful and just” seems to be more than just a credo. It is a fundamental way of imagining the experience of collegiate forensics.

Limitations

No study is without room for improvement and this research is not an exception.

The coding team was composed of four diverse people, representing three ethnicities, three sexual orientations, and varying geographic origins. Additionally, intercoder reliability was $\alpha = 0.742$. However, future studies might take advantage of a larger coding pool, which would enable researchers to analyze any potential connections between the coder’s identity and their response to the survey questions. Additionally, because all four coders are currently connected to

the same region of the forensics culture, there may be a bias in how coders interpreted the memes distributed from competitors in other regions. Future research might employ coders from multiple competitive regions.

The format and use of the Pi Kappa Delta application also imposed some limitations on the current study. While most memes employ some element of humor or shock, many of the photos posted on Pi Kappa Delta were memes intended solely to celebrate a team or individual and their accomplishments. For example, some competitors posted photos of themselves and their peers with the text “fire up” at the beginning of the tournament in order to encourage solidarity and express anticipation. Others posted team photos towards the end of the tournament. Because not all memes are humorous, and because the line between a photo with text and a meme can be thin or non-existent, these were included in the analysis. However, the results might have been different if these photos, or all photos which included actual competitors and/or coaches, were excluded.

Additionally, due to the way profiles were created on the app, it was not possible to verify the race and sex of the person sharing the memes. To further examine the trends noted in this study, a more detailed analysis of the individuals who are sharing images is needed. Further research might control for or examine the role of “thought-leaders” in the memetic imagery; the former might be accomplished by developing a control for the frequency of a single user’s posts.

However, these comments do not detract from the findings of this study because the perception of the activity culture created by the memes is not dependent on these factors. The perception is created from the sum total of the memes and images shared which clearly shows a trend towards greater diversity and inclusion.

Future Directions

This study alludes to many possibilities for future research. Because the impact of forensics competition upon individual identity-formation has remained largely unstudied (Croucher, Long, Meredith, Oommen, & Steele, 2009), and because the topic is so crucial for establishing the effect of forensics upon its participants, future studies could investigate the function of forensics as an identity modifier for collegiate competitors, particularly over time.

Additionally, though there have been inquiries into the diverse makeup of the forensics student population, these studies may be outdated. Two of the most recent projects on the topic, Allen, Trejo, Bartanen, Schroeder, and Ulrich (2004) and Croucher, Thornton, and Eckstein (2006) are over a decade old, and may misrepresent the diversity of the current student population. To assess whether the forensics community is progressing towards its goal of being an inclusive and diverse group, it must necessarily update the information it has on the topic.

Finally, to the knowledge of the researchers, there have been no analyses into the demographics of individual speech events and/or debate events. Because previous research has demonstrated that subcultures within the forensics community do exist (Miller, 2005), and that some of these subcultures may be event-specific (Cambra and Klopff, 1978), future research may examine whether there is a correlation between event types and gender and/or event types and race. It could also examine whether any potential correlations are due to and/or foster particular stereotypes, for example, “only men do extemp.”

These research questions would directly relate to the present study, as they would indicate the degree to which the memes in forensics’ participatory culture reflect the attitudes otherwise indicated by student participants.

Conclusion

There is no doubt that social media and apps like the one used at the 2017 Pi Kappa Delta National Tournament and Convention will continue to develop and shape society in the process. And as demonstrated by the experiences of individuals like Joy Buolamwini, groups like the Algorithmic Justice League are desperately needed to ensure that these platforms represent the full range of human experiences. However, the results of this study seem to indicate that if a community takes active steps to promote diversity and amplify diverse voices, culture can change. Stereotyping and representativeness will continue to be points of discussion moving forward in all communities, but at least in speech and debate, memetic imagery is moving in a more inclusive direction.

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